

10/521625

DT09 Rec'd PCT/PTO 14 JAN 2005

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re National Phase of:

Applicant: Lucy M. MacGregor et al.  
PCT Application No.: PCT/GB2003/002379  
PCT Filing Date: May 30, 2003  
Title: ELECTROMAGNETIC SURVEYING FOR HYDROCARBON RESERVOIRS  
Attorney Docket No. DYOUNP0281US

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

1. Pursuant to 37 C.F.R. 1.97 and 1.98, and in compliance with 37 C.F.R. 1.56, the Office's attention is directed to the patents, pending applications, publications and other information listed on the attached PTO-1449.

Regarding any document, publication or other information for which a date is not given on the attached PTO-1449, Applicant(s) believe(s) the same may qualify as "prior" art to this application and should be treated accordingly, although Applicant(s) reserve(s) the right to contest the prior art status of any document, publication or information, should issue arise.

2. Regarding each listed document that is not in the English language, an English-language translation accompanies this Statement as indicated on the attached PTO-1449 or a concise explanation of the relevance of the document is set forth in the following document(s):

- (a) ☒ Copy of each English language version of a search report indicating the degree of relevance found by the foreign office of each document being submitted from the search report, is being submitted herewith or has previously been submitted.
- (b) ☐ Attached is a "Concise Explanation of Relevance of Non-English Language Documents".

3. Pursuant to 37 C.F.R. 1.97(b) this Statement is being filed (one must be checked):

- (a) ☒ Within 3 months of the filing date, date of entry into the National Stage, or filing date of CPA.
- (b) ☐ Before the mailing date of a first Office Action on the merits. If this Statement is not filed before the mailing date of a first Office Action on the merits, the required certification is given below or, in the absence thereof, the Office is authorized to charge the required fee set forth in 37 C.F.R. 1.17(p) to Deposit Account No. 18-0988 for consideration of this Statement.
- (c) ☐ Before the mailing date of a first Office Action on the merits after a first or second submission after final rejection under 37 C.F.R. 1.129(a).

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(d) \_\_\_ After the period set forth in 37 C.F.R. 1.97(b) but before the mailing date of either a final action or a notice of allowance.

(1) \_\_\_ The required certification is given below, or

(2) \_\_\_ Enclosed is a check covering the fee set forth in 37 C.F.R. 1.17(p) for consideration of this Statement, or

(3) \_\_\_ Charge the fee set forth in 37 C.F.R. 1.17(p) to Deposit Account No. 18-0988

(e) \_\_\_ After the mailing date of either a final action or a notice of allowance, but before payment of the issue fee. Petition hereby is made for consideration of this Statement and the required certification is indicated below.

(1) \_\_\_ Enclosed is a check covering the fee set forth in 37 C.F.R. 1.17(p), or

(2) \_\_\_ Charge the fee set forth in 37 C.F.R. 1.17(p) to Deposit Account No. 18-0988.

4. Certification (if applicable)

(a) \_\_\_ The undersigned hereby certifies that each item of information contained in this Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than 3 months prior to the filing of this Statement.

(b) \_\_\_ The undersigned hereby certifies that no item of information contained in this Statement was cited in a communication from a foreign patent office in a counterpart foreign application or, to the undersigned's knowledge after making reasonable inquiry, was known to any individual designated in 37 C.F.R. 1.56(c) more than 3 months prior to the filing of this Statement.

5. The Commissioner is hereby authorized to charge any additional fees or credit any overpayment to Deposit Account No. 18-0988.

Respectfully Submitted,

RENNER, OTTO, BOISSELLE & SKLAR, LLP

By



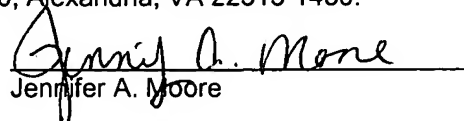
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**CERTIFICATE OF MAILING UNDER 37 C.F.R. §1.8**

I hereby certify that this correspondence (along with any paper referenced as being attached or enclosed) is being deposited on the below date with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Date: 1-14-05



Jennifer A. Moore

Form PTO-1449 (Modified)  <b>LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT</b>  (Use several sheets if necessary)	Atty Docket No.	Serial No.
	DYOUP0281US	10/521625
	Applicant: Lucy M. MacGregor et al.	
	Filing Date	Group

## U.S. PATENT DOCUMENTS

Examiner Initial	Document Number	Date	Name	Class	Sub-class	Filing Date if Appropriate
	2002/079899	06/2002	Frey et al.			
	3,548,299	12/1970	Duroux et al.			
	5,905,657	05/1999	Celniker			
	4,679,174	07/1987	Gelfand			
	5,770,945	06/1998	Constable			

## FOREIGN PATENT DOCUMENTS

Examiner Initial	Document Number	Date	Country	Class	Sub-class	Translation	
						Yes	No
	02/14906	02/2002	WO				
	98/11455	03/1998	WO				
	01/57555	08/2001	WO				
	00/13046	03/2000	WO				

## OTHER ART

Examiner Initial	Author, Title, Date, Pertinent Pages, etc.
	Newman, G. "A Study of Downhole Electromagnetic Sources for Mapping Enhanced Oil Recovery Processes." <u>Geophysics, Society of Exploration Geophysicists</u> . 59.4 (04/1994): 534-545.
	Constable S.C. et al. "Marine Magnetotellurics for Petroleum Exploration Part 1: A Sea-Floor Equipment System." <u>Geophysics, Society of Exploration Geophysicists</u> . 63.3 (05/1998): 816-825.
	Edwards, R.N. et al. "First Results of the MOSES Experiment: Sea Sediment Conductivity and Thickness Determination, Bute Inlet, British Columbia, by Magnetometric Offshore Electrical Sounding." <u>Geophysics, Society of Exploration Geophysicists</u> . 50.1 (01/1985): 153-160.
	Withers et al. "A Case Study of Integrated Hydrocarbon Exploration Through Basalt." <u>Geophysics, Society of Exploration Geophysicists</u> . 59.11 (11/1994): 1666-1679.

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Examiner Initial	Author, Title, Date, Pertinent Pages, etc.
	Kellet R. et al. "The Effects of Source Polarization in CSAMT Data Over Two Massive Sulfide Deposits in Australia." <u>Geophysics, Society of Exploration Geophysicists</u> . 58.12 (12/1993): 1764-1772.
	Urquhart S. et al. "Combining CSAMT and MT in Difficult Exploration Environments." <u>The Leading Edge, Society of Exploration Geophysicists</u> . 16.4 (04/1997): 383-384.
	Sinha, M.C., et al. "An Active Source Electromagnetic Sounding System for Marine Use." <u>Marine Geophysical Researches</u> . 12 (1990): 59-68.
	Evans, R. L. et al. "On the Electrical Nature of the Axial Melt Zone at 13° N on the East Pacific Rise." <u>Journal of Geophysical Research</u> . 99.B1 (1994): 577-588.
	Eidesmo, T., et al. "Sea Bed Logging (SBL), a New Method for Remote and Direct Identification of Hydrocarbon Filled Layers in Deepwater Areas." <u>first break</u> . 20.3 (03/2002): 144-152.
	Ellingsrud, S., et al. "Remote Sensing of Hydrocarbon Layers by Sea-bed Logging (SBL): Results from a cruise offshore Angola." <u>The Leading Edge</u> . 2002.
	MacGregor, L. M. et al. "Use of Marine Controlled Source Electromagnetic Sounding for Sub-basalt Exploration." <u>Geophysical Prospecting</u> . 48 (2000): 1091-1106.
	MacGregor, L.M., et al. "The RAMESSES Experiment III: Controlled Source Electromagnetic Sounding of the Reykjanes Ridge at 57° 45' N. <u>Geophysical Journal International</u> . 135 (1998): 773-789.
	MacGregor, L., et al. "Electrical Resistivity Structure of the Valu Fa Ridge, Lau Basin, From Marine Controlled Source Electromagnetic Sounding." <u>Geophysical Journal International</u> . 146 (2001): 217-236.
	Chave, A.D. et al. "Controlled Electromagnetic Sources for Measuring Electrical Conductivity Beneath the Oceans, 1. Forward Problem and Model Study." <u>Journal of Geophysical Research</u> . 87.B7 (1982): 5327-5338.
	Coggon, J.H. et al. "Electromagnetic Investigation of the Seafloor." <u>Geophysics</u> . 35.3 (1970): 476-489.
	Edwards, R. N., et al. "On Measuring the Electrical Conductivity of the Oceanic Crust by a Modified Magnetometric Resistivity Method." <u>Journal of Geophysical Research</u> . 86.B12 (1981): 11609 -11615.
	Chave Alan D. et al. "Electrical Exploration Methods for the Seafloor." <u>Applied Geophysics</u> . 2 (1991): 931-966.

EXAMINER	DATE CONSIDERED
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EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

### Information Disclosure Statement PTO-1449 (Modified)

The identification of any reference is not intended to be, and should not be understood as being, an admission that such publication, in fact, constitutes "prior art" within the meaning of applicable law since, for example, a given reference may have a later effective date than first seems apparent or the reference may have an effective date which can be antedated. The "prior art" status of any reference is a matter to be resolved during prosecution.

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